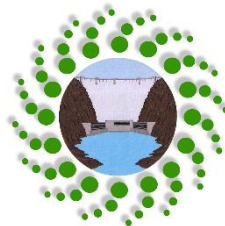


BEFORE
MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION,
SHILLONG

PETITION

FOR
TRUE UP OF GENERATION ARR FOR FY 2013-14
AND
PROVISIONAL TRUE UP FOR FY 2014-15
AND
REVISION OF GENERATION TARIFF FOR FY 2016-17

FILED BY



MePGCL

Generating Clean And Green Energy

**MEGHALAYA POWER GENERATION CORPORATION
LTD.**

LumJingshai, Short Round Road, Shillong - 793 001

BEFORE THE HON'BLE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION

FILE / PETITION NO.....

IN THE MATTER OF

TRUING-UP OF THE ANNUAL REVENUE REQUIREMENT (ARR) FOR THE FY2013-14, PROVISIONAL TRUING-UP OF THE ARR OF THE FY 2014-15 AND REVISION OF GENERATION TARIFF FOR THE FY 2016-17 OF THE MEGHALAYA POWER GENERATION CORPORATION LIMITED (MePGCL) UNDER THE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION (TERMS AND CONDITIONS FOR DETERMINATION OF TARIFF) REGULATIONS, 2011 AND (MULTI YEAR TARIFF) REGULATION, 2014 AND UNDER SECTION-62 READ WITH SECTION 86 OF THE ELECTRICITY ACT 2003.

AND IN THE MATTER OF

MEGHALAYA POWER GENERATION CORPORATION LIMITED, LUMJINGSHAI, SHILLONG – 793001, MEGHALAYA

PETITIONER

The Petitioner respectfully submits as under:

1. In exercising its powers conferred under the section 131 and 133 of the Electricity Act 2003, the State Government of Meghalaya notified "The Meghalaya Power Sector Reforms Transfer Scheme 2010" on 31st March 2010 leading to restructuring and unbundling of erstwhile Meghalaya State Electricity Board (MeSEB) into four entities namely (i) Meghalaya Energy Corporation Limited (MeECL), the Holding Company; (ii) Meghalaya Power Distribution Corporation Limited (MePDCL), the Distribution Utility; (iii) Meghalaya Power Generation Corporation Limited (MePGCL), the Generation Utility; & (iv) Meghalaya Power Transmission Corporation Limited (MePTCL), the Transmission Utility.
2. However, the holding company - MeECL carried out the functions of distribution, generation and transmission utilities from 1st April 2010 to 31st March 2012. Subsequently, through notification dated 31st March 2012, State Government notified an amendment to The Power Sector Reforms Transfer Scheme leading to effective unbundling of MeECL into MeECL (Holding Company), MePDCL (Distribution Utility), MePGCL (Generation utility) and MePTCL (Transmission Utility) from 1st April 2012 onwards.
3. Further, the Government of Meghalaya vide its Power Sector Reforms Transfer Scheme 2010, transferred the assets, properties, rights, liabilities, obligations and personnel of the erstwhile MeSEB into four successor companies, as provided above.
4. The Meghalaya State Electricity Regulatory Commission (hereinafter referred to as "MSERC" or "the Hon'ble Commission") is an independent statutory body constituted under the provisions of the Electricity Act (EA), 2003. The Hon'ble Commission is vested with the authority of regulating the power sector in the State inter alia including determination of tariff for electricity consumers.
5. The Meghalaya State Electricity Regulatory Commission (MSERC), hereinafter referred to as "The Hon'ble Commission") has determined the segregated Aggregate Revenue Requirement (ARR) and tariffs for MePGCL for FY2013-14 and FY2014-15 in accordance with Meghalaya State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011.
6. Under Section 62 of the Electricity Act 2003 and under The Meghalaya State Electricity Regulatory Commission (Terms and conditions for determination of tariff) Regulations, 2011, MePGCL had filed its

Annual Revenue Requirement for the period of FY 2013-14. In respect to the said petition, the tariff order was issued by Hon'ble Commission on 31st March 2013. Similarly, the tariff order for FY 2014-15 was issued by MSERC on 10th April 2014 under the MSERC Tariff Regulations 2011.

7. Moreover, under Meghalaya State Electricity Regulatory Commission i.e. MSERC (Multi Year Tariff) Regulations, 2014, MePGCL has also filed MYT petition for Annual Revenue Requirement for the period of FY 2015-16 to FY 2017-18. In respect to the said petition, MYT order was issued by Hon'ble Commission on 30th March 2015. The Hon'ble Commission has allowed increase in tariff and the new tariff was effective from 1st April 2015.
8. Based on the provisions 15 of the Tariff Regulations, 2011, MePGCL files this petition for approving true-up of FY 2013-14, Provisional true up for FY 2014-15 and approval of revised Tariff for FY 2016-17 based on the true up adjustments.
9. MePGCL has finalized the Audited Statement of Account for FY 2013-14 and has enclosed the same with this petition.
10. The Board has approved Statement of Account for FY 2014-15 for MePGCL and based on the same, MePGCL has proposed Provisional Truing up of Approved figures in the Tariff Order for FY 2014-15 which is described in subsequent section of this petition.
11. The Board of Directors of MePGCL have accorded approval for filing of this petition and authorized the undersigned to file the petition accordingly.
12. The applicant, therefore, humbly prays before the Hon'ble Commission to pass appropriate order on the following:
 - a. Truing-up of FY 2013-14;
 - b. Provisional Truing up of ARR for FY 2014-15 based on the provisional Statement of Accounts and Passing on the provisional Gap to revised Tariff of FY 2016-17
 - c. Revision of Generation Tariff for FY 2016-17

(A Lyngdoh)

Superintending Engineer (Project Monitoring),

For and on behalf of

Meghalaya Power Generation Corporation Ltd

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Abbreviations

ARR	Aggregate Revenue Requirement
COD	Date of Commercial Operation
FY	Financial Year
FPPPA	Fuel and Power Purchase Price Adjustment
GoM	Government of Meghalaya
HEP	Hydro Electric Plant
INR	Indian National Rupee
kWh	Kilo Watt Hour
KV	Kilo Volt
kVA	Kilo Volt Ampere
kVAh	Kilo Volt Ampere Hour
O&M	Operation & Maintenance
MSERC	Meghalaya State Electricity Regulatory Commission
MU	Million Units (Million kWh)
MW	Mega Watt
MYT	Multi Year Tariff
MeECL	Meghalaya Energy Corporation Limited
MePDCL	Meghalaya Power Distribution Corporation Limited
MePTCL	Meghalaya Power Transmission Corporation Limited
MePGCL	Meghalaya Power Generation Corporation Limited
MYT Regulations 2014	MSERC (Multi Year Tariff) Regulation, 2014
RoR	Run of the River
SHP	Small Hydro Plant
SLDC	State Load Dispatch Centre

1 Introduction

1.1 Provisions of Law for True-up

- 1.1.1 The Hon'ble Commission/ State Govt. had notified the Meghalaya State Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2014 on 25th September 2014. It is submitted that the Regulation 1.4 of the Meghalaya State Electricity Regulatory Commission (Multi Year Tariff) regulations, 2014 states as under:

" 1.4 They shall be applicable for the determination of tariff effective from April 1, 2015 in all cases covered under these Regulations. Provided that for the purpose of review or of truing up of revenues and expenses pertaining to FYs prior to 2015-16, the provisions under MSERC (Terms and Conditions for Determination of Tariff) Regulations, 2011 shall apply."

- 1.1.2 The Hon'ble Commission had notified the Meghalaya State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011 on 10th February 2011 (hereinafter referred as "Tariff Regulations, 2011"). These Regulations provide the framework under which the licensees shall determine the tariff for different functions of power sector. Accordingly, the key provisions of the said Regulations are reproduced below for reference.

"15. Review and Truing-Up

(1)

(2) After Audited accounts of a year are made available, the Hon'ble Commission shall undertake similar exercise as above with reference to the final actual figures as per the Audited accounts. This exercise with reference to Audited accounts shall be called 'truing-Up'.

(3) The generating company or the licensee, as the case may be, shall make an application before the Commission, for 'truing up' of ARR of the previous year by 30th September of the following year, on the basis of Audited statement of accounts and the Audit Report, thereon. The generating company or the licensee shall get their accounts Audited within a specified time frame, either by the Comptroller & Auditor General of India or by a Statutory Auditor drawn from the panel of Statutory Auditors approved by the Comptroller & Auditor General of India, from time to time, to enable them to file the application for 'truing up' within the specified date, that is 30th September of the following year."

- 1.1.3 Section 61 & Section 62(c) & (d) of Electricity Act 2003 empower the Hon'ble Commission to determine tariff for generation for the generating company.
- 1.1.4 The Power Sector Reforms Transfer Scheme lead to effective unbundling of MeECL into MeECL (Holding Company), MePDCL (Distribution Utility), MePGCL (Generation utility) and MePTCL (Transmission Utility) from 1st April 2012 onwards.
- 1.1.5 It is submitted that as per Regulation 15 (3) of the Meghalaya State Electricity Regulatory Commission (Terms and Condition for determination of tariff) Regulations, 2011, the licensee shall get their accounts audited either by C&AG of India or by a statutory auditor drawn from the panel of

statutory auditor approved by the C&AG.

- 1.1.6 In the **Judgment of High Court of Delhi dated: 30th October 2015**, it is stated that the requirement of C&AG is not necessary for determination of Tariff by the State Commission. The relevant extract of the Order is reproduced below:-

“....

D. Audit under Section 20(1), for the reasons stated i.e. for determination of tariff is not expedient in public interest as the determination of tariff is on the sole domain of DERC which is well empowered to itself conduct the same or have the same conducted and the report of CAG of audit of DISCOMs has no place in the Regulatory Regime brought about by the Electricity Act and the Reforms Act.

E. Thus, the impugned direction for audit of DISCOMs under Section 20(1) of the CAG Act is quashed / set aside.

....”

- 1.1.7 In this context, it is further submitted that, M/s Kiron Joshi & Associates has been appointed as Statutory Auditor of MePGCL, and M/s Amit O P Sharma & Associates has been appointed as Statutory Auditor of MeECL for the FY 2013-14. The firms are chartered Accountancy firms, appointed as empaneled statutory Auditors by Comptroller & Auditor General of India (C&AG). M/s Kiron Joshi & Associates and M/s Amit O P Sharma & Associates have audited the Annual Accounts of MePGCL and MeECL, respectively for FY 2013-14 under the Companies Act, 1956.
- 1.1.8 The audited statement of accounts for MePGCL for FY 2013-14 are appended as **Annexures**.

Submissions before the Hon'ble Commission

- 1.1.9 As such, MePGCL hereby submits the petition under section 61, 62 (1) (a) of the Electricity Act, 2003, Tariff Regulations, 2011 and MSERC (Multi Year Tariff) Regulations, 2014 for approval of true-up of FY 2013-14, Provisional Truing up of FY 2014-15 and to pass the Gaps of FY 2013-14 and FY 2014-15 for Revision of Generation Tariff for FY 2016-17.

2 Truing Up for FY 2013-14

2.1 Performance

2.1.1 Existing Generation Capacity:

The initial installed capacity when the erstwhile Meghalaya State Electricity Board (MeSEB) was bifurcated from the Assam State Electricity Board (ASEB) in 1975 was 65.2 MW. With the commissioning of Stage-III HEP (1979), Stage IV HEP (1992) & Sonapani Mini Hydel and uprating of Umiam Stage-II (from 18MW to 20MW in 2012), the installed capacity increased by 121.5 MW to 188.70 MW

All the Generating Stations except Sonapani Mini Hydel Project, as indicated in the Table below are hydel power stations with the main reservoir at Umiam for all the stages. Therefore, all these stages depend mainly on water availability at the Umiam reservoir. The total installed capacity of MePGCL projects at the start as on March 2012, was as under:

TABLE 1.1: DETAILS OF EXISTING GENERATION CAPACITY

SIN o.	Name of Station	No. of Units	Capacity (MW)	Total Capacity (MW)	Year of Commissioning
1.	Umiam Stage I	I	9	36	21.02.1965
		II	9		16.03.1965
		III	9		06.09.1965
		IV	9		09.11.1965
2.	Umiam Stage II	I	10	20*	22.07.1970
		II	10		24.07.1970
3.	Umiam Stage III	I	30	60	6.01.1979
		II	30		30.03.1979
4.	Umiam Stage IV	I	30	60	16.09.1992
		II	30		11.08.1992
5.	Umtru Power Station	I	2.8	11.2	01.04.1957
		II	2.8		01.04.1957
		III	2.8		01.04.1957
		IV	2.8		12.07.1968
6.	Mini Hydel (Sonapani)	I	1.5	1.5	27.10.2009
	Total			188.70	

*Upated from 18 Mw to 20 MW in 2012

2.1.2 New Generation Capacity:

MePGCL has commissioned 126 (42x3) MW Leshka HEP with all its three units and presently generating with its full capacity. In addition to that MePGCL is also currently executing works of Lakroh Mini Hydel project which is proposed for commissioning in FY 2016-17.

TABLE 1.2:NEW PROJECT/ PLANTS DETAILS

No.	Name & Location	Capacity (MW)	Year of Commencement	Schedule Date of Commercial Operation / COD
1	Leshka HEP	42 x 3 = 126	2004	Unit I – 1.4.2012 Unit II – 1.4.2012 Unit III – 1.4.2013
2	Lakroh SHP	1.5	2003	2016-17

The computation of energy and other costs for the new projects as indicated in Table above are discussed in subsequent sections.

2.1.3 Computation of Generation Energy:

The following sections outline details of operational norms for computation of energy generation for FY 2013-14 based on Tariff Regulations, 2011 or past trend as the case may be.

2.1.4 Operation Norms

The following sections provide the extract of the Tariff Regulations, 2011 with respect to computation of generation energy.

2.1.4.1 Normative Annual Plant Availability Factor

TABLE 1.3:NORMATIVE ANNUAL PLANT AVAILABILITY FACTOR

No.	Station Particular	Norm
1	Storage and pondage type plants: where plant availability is not affected by silt and	
a	with head variation between Full Reservoir Level (FRL) and Minimum Draw Down Level (MDDL) of upto 8 %	90 %
b	with head variation between FRL and MDDL of more than 8%	(Head at MDDL/Rated Head) x 0.5 + 0.2

No.	Station Particular	Norm
2	Pondage type plant	where plant availability is significantly affected by silt - 85%

Note:

- (i) A further allowance may be made by the Hon'ble Commission under special circumstances, eg. Abnormal silt problem or other operating conditions, and known plant limitations.
- (ii) A further allowance of 5 % may be allowed for difficulties in the North East Region.
- (iii) In case of new hydroelectric project the developer shall have the option of approaching the Hon'ble Commission in advance for further above norms.

However in the Tariff order for FY 2013-14, the Hon'ble Commission has not provided specific norms of normative annual plant availability factor (NAPAF) of all generating stations without knowing the actual and verified technical details of each plant. For the purpose of capacity charges, the Hon'ble Commission has approved recovery of fixed charges on the basis of plant availability each month. The Hon'ble Commission had stated that it shall take a final view on design energy and NAPAF after getting a proper study of all generating stations in Meghalaya at the time of next tariff filing.

The proposed NAPAF for all generating stations including Myntdu Leshka HEP for FY 2013-14 are summarized below,

TABLE 1.4: PROPOSED NORMATIVE PLANT AVAILABILITY FACTOR FY 2013-14

Station	As per actual	NAPAF with 5% allowance
Uiam Stage-I	64.83	59.83
Uiam Stage-II	90.00	85.00
Uiam Stage-III	68.67	63.67
Uiam Stage-IV	66.79	61.79
Umtru	85.00	80.00
Sonapani	50.00	45.00
MLHEP	44.00	39.00

2.1.4.2 Auxiliary Consumption and Transformation Loss

TABLE 1.5: AUXILIARY CONSUMPTION AND TRANSFORMATION LOSS

Sl.No	Station Particular	Norm
1	Surface hydroelectric power generating stations with rotating exciters mounted on the generator shaft	0.7% of energy generated
2	Surface hydroelectric power generating stations with static excitation system	1.0% of energy generated

Sl.No	Station Particular	Norm
3	Underground hydroelectric power generating stations with rotating exciters mounted on the generator shaft	0.9% of energy generated
4	Underground hydroelectric power generating stations with static excitation system	1.2% of energy generated

The Hon'ble Commission in the Tariff Order for FY 2013-14 has approved auxiliary consumption and transformation losses as given below

TABLE 1.6: AUXILIARY CONSUMPTION AND TRANSFORMATION LOSS APPROVED BY THE HON'BLE COMMISSION

Name of the Plant	Auxiliary consumption (%)	Transformation losses** (%)
Umiam Stage I	0.7	0.5
Umiam Stage II	0.7	0.5
Umiam Stage III	0.7	0.5
Umiam Stage IV	1.0	0.5
Umtru	0.7	0.5
Sonapani	0.7	0.5
Leshka HEP	1.0*	0.5

*The Hon'ble Commission has not separately approved Auxiliary consumption and Transformation loss for Leshka HEP. However in the order for FY 2013-14, the Hon'ble Commission has specified that auxiliary consumption for Surface type with static excitation is 1% and Leshka HEP falls under this category.

** Also the Hon'ble Commission in its order for FY 2013-14 has mentioned that transformation losses from generation voltage to transmission voltage of 0.5% shall be accounted against transformation losses from the energy. The Auxiliary consumption and Transformation losses, as actual for MePGCL for FY 2013-14 are furnished below

TABLE 1.7: AUXILIARY CONSUMPTION AND TRANSFORMATION LOSS ACTUAL FY 2013-14

Name of the Plant	Auxiliary consumption (%)	Transformation losses (%)
Umiam Stage I	0.8	0.5
Umiam Stage II	0.2	0.5
Umiam Stage III	0.2	0.5
Umiam Stage IV	0.2	0.5
Umtru	0.4	0.5
Sonapani	0.3	0.5
Leshka HEP	0.2	0.5

MePGCL has operated its plants efficiently and under the norms specified by the Hon'ble Commission and has been able to limit auxiliary consumption for plants in the limit set by the Hon'ble Commission in the tariff order for FY 2013-14.

2.1.4.3 Design Energy – Existing Generating Stations

The design energy for MePGCL power stations is provided in the table below:

TABLE 1.8: DESIGN ENERGY APPROVED BY THE HON'BLE COMMISSION

Name of Power Station	Design Energy (MU)
Umiam Stage I	116.29
Umiam Stage II	45.51
Umiam Stage III	139.4
Umiam Stage IV	207.5
Umtru	39.01
Mini Hydel (Sonapani)	5.5
Leshka HEP	486.23
Lakroh	11.01
Total	1050.45

2.1.5 Computation of Energy Generation - Existing Stations:

The computation of hydro power generation requires Design Energy, Capacity Index, Details of Reservoir levels, Head details, Past Availability details, features of the hydro power plants in terms of type of plant, type of excitation etc which are provided in the table below, for reference:

TABLE 1.9: MEPGCL PLANTS TECHNICAL DETAILS

SI No	Particulars	Umtru	Umiam I	Umiam II	Umiam III	Umiam IV	Mini Hydel Sonapani	Leshka HEP
1	Type of Station							
A	Surface/ Under Ground	Surface	Surface	Surface	Surface	Surface	Surface	Surface
B	Purely RoR/ Pondage/ Storage	RoR	Storage	Power Channel (Pondage)	Pondage	Pondage	RoR	RoR
C	Peaking/ Non Peaking	Non Peaking	Non Peaking	Non Peaking	Non Peaking	Non Peaking	Non Peaking	Non Peaking
D	No of Hours Peaking	NA	NA	NA	NA	NA	NA	NA
E	Overload Capacity	NIL	NIL	NIL	NIL	NIL	NIL	NIL

SI No	Particulars	Umtru	Umiam I	Umiam II	Umiam III	Umiam IV	Mini Hydel Sonapani	Leshka HEP
2	Type of Excitation							NA
A	Rotating exciters on Generator	Rotating exciters on Generator	Rotating exciters on Generator	Rotating exciters on Generator	Rotating exciters on Generator	NA	Rotating exciters on Generator	NA
B	Static Excitation	NA	NA	NA	NA	Static Excitation	NA	Static Excitation

The station-wise Net Generation Approved for FY 2013-14 and actual of MePGCL for FY 2013-14 are provided in the table below:

TABLE 1.10: SUMMARY OF APPROVED AND ACTUAL NET GENERATION FY 2013-14

Sl No	Approved by the Hon'ble Commission in Tariff Order for FY 2013-14						Actual MePGCL FY 2013-14				
	Name of the Power Station	Gross Generation (MU)	Aux Cons (%)	Transformation (%)	Aux Cons & Transformation Loss (MU)	Net Generation (MU)	Gross Generation (MU)	Aux Cons (%)	Transformation (%)	Aux Cons & Transformation Loss (MU)	Net Generation (MU)
1.	Umiam I	116.29	0.7%	0.5%	1.40	114.89	79.15	0.8%	0.5%	1.03	78.12
2.	Umiam II	45.51	0.7%	0.5%	0.55	44.96	41.32	0.2%	0.5%	0.29	41.03
3.	Umiam III	139.4	0.7%	0.5%	1.67	137.73	133.55	0.2%	0.5%	1.00	132.55
4.	Umiam IV	207.5	1.0%	0.5%	3.11	204.39	174.88	0.2%	0.5%	1.24	173.64
5.	Umtru Power Station	39.01	0.7%	0.5%	0.47	38.54	21.01	0.4%	0.5%	0.18	20.83
6.	Mini Hydel (Sonapani)	5.5	0.7%	0.5%	0.07	5.43	5.41	0.3%	0.5%	0.04	5.37
7.	Leshka HEP	486.23	1.0%	0.5%	5.83	480.40	413.24	0.2%	0.5%	3.03	410.22
8.	Total	1039.44			13.10	1026.34	868.56			6.80	861.76

2.2 Determination of Annual Fixed Charges

2.2.1 Calculation Methodology

- 2.2.1.1 MePGCL has finalized its Audited Statement of Accounts for FY 2013-14 which are attached as Annexure B. Based on the figures of the Audited Statement of Account, MePGCL has prepared comparison of AFC sub components for FY 2013-14 and arrived at net Gap/ Surplus of the AFC components.
- 2.2.1.2 MePGCL has considered Approved AFC components from Tariff Order FY 2013-14 for all existing Power plants except Leshka HEP. Since all the three units of Leshka HEP were in operation as on 1st April, 2013, MePGCL has also considered AFC components of Leshka HEP in this Truing up. However, since Lakroh HEP has not yet started commercial operations, it has not been included in the actual ARR figures proposed in this Truing up petition.
- 2.2.1.3 The Audited Statement of Account of MePGCL is consolidated one and the plant wise details are not available. However, the Commission had approved separate AFCs for the new plants i.e. Leshka HEP and Lakroh HEP in the tariff order for FY 2013-14.
- 2.2.1.4 As such, MePGCL, in this exercise, has calculated the approved ARR components of MePGCL as a whole using the segregated approved ARRs of the new plants and adding it to the approved ARR components of the old plants.
- 2.2.1.5 In this exercise, MePGCL has considered total ARR for Leshka as INR 135.54 Crore, as approved in the Tariff Order of FY 2013-14. Further, MePGCL has also considered approved Interest cost for Leshka HEP as INR 72.95 Crores, as considered by the Commission in the tariff order for FY 2012-13. For the other AFC components, MePGCL has proportionately allocated rest of the approved AFC components of the Leshka HEP in different sub heads in the ratio of the AFC components of the existing plants and added those to approved AFC sub components of existing plants for FY 2013-14. Based on the Approved and estimated AFC components, MePGCL has made comparison of its actual Expenses as per Audited statement of Accounts and Regulations and arrived at Gap/Surplus.
- 2.2.1.6 Further, as per the approach adopted by the Hon'ble Commission in the Tariff Order for FY 2013-14, MePGCL has considered equal proportion of AFC components of the holding company MeECL among the three successor companies i.e. 1/3rd each in MePGCL, MePTCL and MePDCL.

2.2.2 Components of Tariff

In accordance with the MSERC Tariff Regulations, 2011, the Tariff for supply of electricity from Hydro Power Generating Station shall comprise of two parts namely, Annual Capacity Charges and Energy Charges. Fixed charges shall be comprised of following components:

- (1) Operation and Maintenance Expenses
- (2) Interest on Loan Capital
- (3) Interest on Working Capital

- (4) Depreciation as may be allowed by the Hon'ble Commission
- (5) Return on Equity as may be allowed by the Hon'ble Commission
- (6) Taxes on Income.

2.2.3 Return on Equity:

The Hon'ble Commission has approved Return on Equity in the order for FY 2013-14 has mentioned in the table below including proportionate component of Leshka HEP.

TABLE 1.11: ROE APPROVED IN FY 2013-14(INR CRORE)

Particulars	As approved by MSERC for Plants except Leshka HEP (INR Crores)	Approved for Leshka HEP (INR Crores)	Total (INR Crores)
Return on Equity	9.43	10.12	19.55

As per Audited Statement of Accounts for MePGCL for FY 2013-14, the average equity base has been considered as INR 680.41 Crores including pending allotment of INR 679.91 Crore. Based on this, MePGCL has calculated return on Equity for FY 2013-14.

TABLE 1.12: ROE SUMMARYFOR MEPGCL IN FY 2013-14 (INR CRORE)

Particulars	Actual FY 2013-14 For MePGCL	Total MePGCL	Gap (-)/Surplus
Total Equity Amount including pending allotment	680.41	95.26	-75.71
Return on Equity (%)	14%		
Return on Equity	95.26		

2.2.4 Depreciation

The Hon'ble Commission, in the order for FY 2013-14 has allowed depreciation charges for Umiam IV and Sonapani Mini Hydel power stations as depreciable life cycle of other plants are completed. Along with the same, MePGCL has considered proportionate Depreciation component for Leshka HEP from its approved ARR by the Hon'ble Commission in the Tariff Order for FY 2013-14.

TABLE 1.13: DEPRECIATION (INR CRORE)

Particulars	As approved by MSERC for Plants except Leshka HEP (INR Crores)	Approved for Leshka HEP (INR Crores)	Total (INR Crores)
Umiam Stage IV	1.85	-	-
Sonapani	0.5	-	-

Particulars	As approved by MSERC for Plants except Leshka HEP (INR Crores)	Approved for Leshka HEP (INR Crores)	Total (INR Crores)
Total depreciation allowed for 2013-14	2.35	2.52	4.87

MePGCL has considered Depreciation for Plants whose useful life cycle is not over. In addition to that, MePGCL has considered Depreciation for Leshka HEP as it is in full capacity operation and achieved COD for all its three units. Also MePGCL has added one third of depreciation booked for MeECL in its Depreciation for FY 2013-14. The depreciation comparison as per Audited Statements of Account and the approved figures for FY 2013-14 are as summarized in the table below,

TABLE 1.14: DEPRECIATION SUMMARY (INR CRORE) FY 2013-14

Particulars	Approved by the Hon'ble Commission FY 2013-14	Actual FY 2013-14	Gap(-)/ Surplus
Depreciation for MePGCL (existing plants)	2.35	66.35	-61.73
Depreciation for MePGCL (MyntduLeshka)	2.52		
Depreciation for MeECL	-	0.78	
Total	4.87	66.61	

2.2.5 Interest and Finance Charges

The Hon'ble Commission in the Tariff order for FY 2013-14 has not approved any Interest and Finance charges for MePGCL's existing plants. But for Leshka HEP the Hon'ble Commission has approved an Interest amount of INR 72.95 Crore in FY 2012-13. MePGCL has considered the same amount as approved Interest to be paid for Leshka HEP in FY 2013-14.

As per Audited Statements of Accounts for FY 2013-14, MePGCL has incurred Interest expense and associated Finance charges of INR 98.34 crores. The summary of Interest and Finance charge approved in FY 2013-14 and actuals is shown in the table below,

TABLE 1.15: INTEREST AND FINANCE CHARGES SUMMARY (INR CRORE)

Particulars	Approved by the Hon'ble Commission FY 2013-14 including Leshka HEP	Actual FY 2013-14 For MePGCL	Actual FY 2013-14 For MeECL	Total MePGCL FY 2013-14	Gap (-) /Surplus
Interest and Finance Charges	72.95	98.34	0.02	98.35	-25.40

2.2.6 Operation & Maintenance expenditure

The Hon'ble Commission has approved total O&M expense for MePGCL for FY 2013-14 as INR 44.20 Crore including O&M cost for Sonapani Mini Hydel of INR 0.27 Crore. However, the break-up of O&M heads for Sonapani are not available in the Tariff order for FY 2013-14. For Truing up purpose, MePGCL has segregated O&M expense of Sonapani into sub heads proportionately with the approved O&M sub heads of other existing power plants as given in the Tariff Order for FY 2013-14. The details of the approved expenses has been tabulated below,

TABLE 1.16: O & M EXPENSES (INR CRORE) APPROVED FY 2013-14

Particulars	As approved by MSERC except Sonapani FY 2013-14	Approved for Sonapani	Total MePGCL except Leshka HEP	Approved for Leshka HEP	Total
R & M expenses	7.35	0.05	7.40	7.94	15.33
Employees cost	35.02	0.22	35.24	37.81	73.05
A & G cost	1.55	0.01	1.56	1.67	3.23
Total O&M Cost	43.93	0.27	44.20	47.43	91.63

For Truing up, the actual O&M expenses for MePGCL works out to be INR 67.54 Crores, including the apportioned O&M cost for MeECL.

The Hon'ble Commission has approved INR 7.40 Crore for MePGCL's existing plants as R&M cost for FY 2013-14. After adding the R&M cost for Leshka HEP, the total approved amount comes out to be INR 15.33 Crore. However actual R&M cost for FY 2013-14 is INR 6.33 Crores, which helps it to realize a surplus of INR 9.00 Crore in FY 2013-14 under R&M expenses.

MePGCL had 901 numbers of Employees at the end of FY 2013 which was reduced to 871 by the end of FY 2014 due to retirements. As such, the employee cost in FY 2013-14 for MePGCL was INR 55.66Crore including employee cost of MeECL. This figure indicates a surplus of INR 17.38 Crore over the approved amount of 73.05 Crore approved in the Tariff Order for FY 2013-14 as shown above.

The Hon'ble Commission had approved A&G cost for FY 2013-14as 1.56 Crores for existing plants and for Leshka HEP, the A&G Expenses have been derived as INR 1.67 Crores. As such, the total approved A&G expenses for MePGCL works out as INR 3.23 Crore. The actual A&G cost for FY 2013-14 is INR 4.38 Crores and the same for MeECL is INR 3.50 Crores. Including the proportionate component of MeECL, total A&G cost actual for FY 2013-14 is INR 5.54 Crore which indicates a gap of INR 2.31 Crore from the approved value of FY 2013-14.

TABLE 1.17: COMPARISON OF O & M EXPENSES (INR CRORE)

Particulars	Approved by the Hon'ble Commission FY 2013-14	Actual FY 2013-14 For MePGCL	Actual FY 2013-14 For MeECL	Total MePGCL	Gap (-) / Surplus
R & M expenses	15.33	6.27	0.17	6.33	9.00
Employees cost	73.05	52.99	8.03	55.66	17.38
A & G cost	3.23	4.38	3.50	5.54	-2.31
Total O&M Cost	91.63	63.64	11.71	67.54	24.09

The overall O&M figure of MePGCL for FY 2013-14 as per the Audited Statement of Accounts indicates a surplus of INR 24.09 Crores over the approved value of the Hon'ble Commission in the Tariff Order for FY 2013-14.

2.2.7 Interest on Working Capital:

The Interest on working capital approved by the Hon'ble Commission for FY 2013-14, is as summarized below:

TABLE 1.18: INTEREST ON WORKING CAPITAL (INR CRORE)

Particulars	Total MePGCL except Leshka HEP	Approved for Leshka HEP	Total
Amount of interest on working capital for FY 2013-14	1.88	2.02	3.90

MePGCL has followed the methodology as shown below as per the regulation for calculation of Interest on Working Capital for FY 2013-14. Working Capital shall cover:

1. Operation and Maintenance expenses for one month;
2. Maintenance spares at the rate of 15% of operation and maintenance expenses
3. Receivables equivalent to two months of fixed cost.

The Rate of interest on working capital has been taken as the short-term Prime Lending Rate of State Bank of India as on 1st April of the FY 2013-14.

TABLE 1.19: INTEREST ON WORKING CAPITAL (INR CRORE)

Particulars	Total	Gap (-)/ Surplus
Operation and Maintenance Expense for One Month	5.63	-6.78
Maintenance Spare at 15% O&M	10.13	
Two Months Receivable of ARR	56.62	
Working capital required for FY 2013-14	72.38	
Rate of interest (%)	14.75%	
Amount of interest on working capital for FY 2013-14	10.68	

2.2.8 Connectivity and SLDC charges:

The Connectivity and SLDC charges approved by the Hon'ble Commission for FY 2013-14 are as summarized below. The Commission in its Tariff Order for FY 2013-14, has fixed SLDC charges for Leshka HEP INR 0.50 Crore.

TABLE 1.20: SLDC CHARGES APPROVED INR CRORE

Particulars	Total MePGCL except Leshka HEP	Approved for Leshka HEP	Total (INR Crores)
SLDC charges for Umiam Stage I	0.15	-	1.28
SLDC charges for Umiam Stage II	0.085	-	
SLDC charges for Umiam Stage III	0.25	-	
SLDC charges for Umiam Stage IV	0.25	-	
SLDC charges for Umtru	0.04	-	
SLDC charges for Sonapani	0.005	-	
Total	0.78	0.50	

However as per audited statement of accounts, SLDC charges of MePGCL is INR 1.31 Crore based on the SLDC order of FY 2013-14 passed by the Commission.

TABLE 1.21: COMPARISON OF SLDC CHARGES (INR CRORE)

Particulars	Approved by the Hon'ble Commission FY 2013-14	Actual (INR Crore) FY 2013-14 For MePGCL	Actual (INR Crore) FY 2013-14 For MeECL	Total	Gap (-) / Surplus
SLDC charges	1.28	1.31	0.00	1.31	-0.03

2.2.9 Misc. Expense, Bad Debts and other misc. written off

The Hon'ble Commission has not approved any amount under this head in the Tariff Order for FY 2013-14. However as per Audited Statement of Account, MePGCL has arrived on figures given in the table below for Misc. Expense, Bad Debts and other misc. written off including the proportionate value of the same for MeECL.

TABLE 1.22: COMPARISON OF MISC. EXPENSE, BAD DEBTS AND OTHER MISC. WRITTEN OFF CHARGES (INR CRORE)

Particulars	Approved by the Hon'ble Commission FY 2013-14	Actual (INR Crore) FY 2013-14 For MePGCL	Gap (-) / Surplus
Miscellaneous expenses, bad debts etc.	0.00	0.01	-0.01

2.2.10 Prior Period Items

The Hon'ble Commission has not approved any amount for Prior Period Expense for MePGCL in the Tariff Order for FY 2013-14. According to Audited Statement of Accounts, MePGCL and MeECL both has incurred some Prior period Items details of which has been summarized below,

TABLE 1.23: PRIOR PERIOD ITEMS (MEPGCL)

Expenses	MePGCL
Employee costs	0.49
Depreciation under provided in previous year	0.65
Interest & Other Finance Charges	0.00
Others	11.24
Total Prior Period Expense	12.38
Incomes	
Other excess provision	0.94
Total Prior Period Income	0.94
Total (Expense)	11.44

Prior Period Items (MeECL)	
A. Income Relating to Previous Years	MeECL
Other excess provision & Other Income	0.780
Total	0.780
B. Prior Period Expenses/Losses	
Employee costs	0.039
Administrative Expenses	0.004
Total	0.043
Total	0.737

After considering proportionate components for MeECL, the total prior period expense for MePGCL comes out at as INR 11.69 Crore for FY 2013-14.

TABLE 1.24: PRIOR PERIOD ITEMS (INR CRORE)

Particulars	Approved by the Hon'ble Commission FY 2013-14	Actual FY 2013-14 For MePGCL	Actual FY 2013-14 For MeECL	Total	Gap (-)/ Surplus
Prior period expenses	0	11.44	0.74	11.69	-11.69

2.2.11 Non-Tariff Income

The Hon'ble Commission has not approved any amount as Non-Tariff Income in the Tariff Order for MePGCL for FY 2013-14. However as per Audited Statement of Accounts, MePGCL has earned Non-Tariff Income as mentioned below.

TABLE 1.25: NON TARIFF INCOME (INR CRORE)

Particulars	Approved by the Hon'ble Commission FY 2013-14	Actual FY 2013-14 For MePGCL	Actual FY 2013-14 For MeECL	Total	Gap (-)/ Surplus
SLDC charges	0.00	1.25	13.03	5.60	5.60

2.2.12 Summary of Annual Fixed Charges

The summary of Annual fixed charges approved by the Hon'ble Commission for existing generating stations is given below. As stated above, the total approved ARR of Leshka HEP has been allocated among various components of AFC in the manner shown below:

TABLE 1.26: SUMMARY OF ANNUAL FIXED CHARGES APPROVED BY THE HON'BLE COMMISSION FY 2013-14 (INR CRORE)

Particulars	ARR Existing Plants	ARR For Leshka	Total ARR
O & M expenses	44.2	47.43	91.63
Depreciation	2.35	2.52	4.87
Interest on Loan	0	72.95	72.95
Interest on working capital	1.88	2.02	3.90
Return on Equity	9.43	10.12	19.55
Income Tax	0	0.00	0.00
SLDC charges	0.78	0.50	1.28
Misc. Expense, Bad Debts and other misc. written off		0.00	0.00
Prior Period Items	0	0.00	0.00
Total ARR	58.64	135.54	194.18
Less:Non-Tariff Income	0	0	0.00
Net ARR	58.64	135.54	194.18

Based on the above mentioned consolidated approved figures for MePGCL, a comparison of actual audited figures is done with the approved figures under relevant heads, which is tabulated below.

TABLE 1.27: COMPARISON OF SUMMARY OF ANNUAL FIXED CHARGES FOR FY 2013-14 (INR CRORE)

Particulars	As approved by MSERC	Actuals FY 2013-14			Gap(-) /Surplus
	Total ARR	MePGCL	MeECL	Total Including MeECL	
O & M expenses	91.63	63.64	11.71	67.54	24.09
Depreciation	4.87	66.35	0.78	66.61	-61.73
Interest on Loan	72.95	98.34	0.02	98.35	-25.40
Interest on working capital	3.90	10.43	0.73	10.68	-6.78
Return on Equity	19.55	95.26	0.00	95.26	-75.71
Income Tax	0.00	0.00	0.00	0.00	0.00

Particulars	As approved by MSERC	Actuals FY 2013-14			Gap(-) /Surplus
	Total ARR	MePGCL	MeECL	Total Including MeECL	
SLDC charges	1.28	1.31	0.00	1.31	-0.03
Misc. Expense, Bad Debts and other misc. written off	0.00	0.00	0.02	0.01	-0.01
Prior Period Items	0.00	11.44	0.74	11.69	-11.69
Total ARR	194.18	335.33	13.25	351.43	-157.25
Less Non Tariff Income	0.00	1.25	13.03	5.60	5.60
Net ARR	194.18	334.07	0.22	345.83	-151.65

MePGCL humbly request the Hon'ble Commission to pass through gap of INR 151.65 Crores. It is submitted here that since the Commission had not provided the target for each component of AFC for MePGCL and allowed the total AFC of new plants on provisional basis, MePGCL has not calculated the gain and loss for each component of AFC as per MSERC Tariff Regulations 2011. In other words, the difference in each of the component, both surplus and gap, has been proposed to be passed entirely to the consumers, for FY 2013-14.

3 Provisional True up for 2014-15

MePGCL has prepared Statement of Accounts of FY 2014-15 and the same has been approved by the Board of Directors. However, the same has not been audited and the process of audit is in progress. Based on the available provisional Statement of Accounts, MePGCL has arrived at actual ARR components for FY 2014-15 and compared the same with approved ARR cost by the Hon'ble Commission for FY 2014-15.

The Tariff order of FY 2014-15 has ARR components for existing power plants of MePGCL except Leshka HEP. MePGCL has filed the ARR petition separately for Leshka HEP on 20th January 2014, which was disposed of by the Hon'ble Commission on 10th April 2014. In that Order dated 10.04.2014, the Hon'ble Commission has passed that the ARR for Leshka HEP in FY 2014-15 would be considered same as that approved in FY 2013-14. The same was approved on provisional basis in absence of independent study and technical validation.

As such, for provisional Truing up for FY 2014-15, MePGCL has adopted the same approach as followed in the Truing up of FY 2013-14. MePGCL considered Interest and Finance Charge for Leshka HEP as same as approved in FY 2012-13 and proportionately divided the remaining ARR in other components in the ratio of the approved ARR components of old plants for FY 2014-15. In addition to that, to arrive at actual ARR, MePGCL has included equal proportion of ARR for MeECL in to its ARR.

MePGCL hereby, humbly requests the Hon'ble Commission to pass the Gap/Surplus, as shown below, regarding the provisional Truing up of FY 2014-15 for revision of Generation Tariff for FY 2016-17.

TABLE 2.1: COMPARISON OF SUMMARY OF ANNUAL FIXED CHARGES FY 2014-15(INR CRORE)

Particulars	As approved by MSERC	Actuals FY 2014-15			Gain/ (Loss)
	Total ARR	MePGCL	MeECL	Total Including MeECL	
O & M expenses	99.43	43.96	93.05	74.98	24.45
Depreciation	8.13	67.13	0.67	67.35	-59.22
Interest on Loan	72.95	137.75	0.00	137.75	-64.80
Interest on working capital	4.40	10.41	5.02	12.08	-7.68
Return on Equity	19.55	101.30	0.00	101.30	-81.75
Income Tax	0.00	0.00	0.00	0.00	0.00
SLDC charges	1.67	1.17	0.00	1.17	0.50
Misc. Expense, Bad Debts and other misc. written off	0.00	0.07	0.002	0.07	-0.07
Prior Period Items Income (-)/ Expense	0.00	2.07	-0.06	2.05	-2.05
Total ARR	206.14	361.78	98.76	394.70	-188.56
Less: Non-Tariff Income	0.67	0.47	24.68	8.70	8.03

Particulars	As approved by MSERC	Actuals FY 2014-15			Gain/ (Loss)
	Total ARR	MePGCL	MeECL	Total Including MeECL	
Net ARR	205.47	361.31	74.07	386.00	-180.53

MePGCL humbly requests the Hon'ble Commission to pass through gap of INR 180.53 Crores. It is submitted here that since the Commission had not provided the target for each component of AFC for MePGCL and allowed the total AFC of new plants on provisional basis, MePGCL has not calculated the gain and loss for each component of AFC as per MSERC Tariff Regulations 2011. In other words, the difference in each of the component, both surplus and gap, has been proposed to be passed entirely to the consumers, for FY 2013-14.

4 Revision of Tariff for FY 2016-17

MePGCL has filed the MYT petition for FY 2015-16 to FY 2017-18 on 22.12.2014 under the MSERC (Multiyear Tariff) Regulations 2014. The petition was for determining the ARR for the control period FY 2015-16, FY 2016-17 & FY 2017-18 and determination of tariff of their old power stations and Sonapani power station for FY 2015-16.

The Hon'ble Commission accepted the proposal of the Corporation to continue with the present tariff of Leshka project till the filing of petition for determination of final tariff.

The Hon'ble Commission on the basis of records submitted by MePGCL passed the order on 30.03.2015 for determining annual fixed charges for FY 2015-16, FY 2016-17 & FY 2017-18 for old generating stations and Sonapani of MePGCL. Accordingly, the Hon'ble Commission proceeded for determination of tariff for FY 2015-16 on the basis of available information for old projects and Sonapani.

In the above sections, MePGCL has calculated the total gap resulting from the Truing up of FY 2013-14 and provisional Truing up of FY 2014-15, which now needs to be recovered by MePGCL from the revised generation tariff of FY 2016-17. As provided above, the gap has been calculated for MePGCL as a whole, including old plants as well as Leshka.

In order to segregate the net gap arrived for FY 2013-14 and FY 2014-15 among Sonapani, Leshka HEP and all other existing Plants, MePGCL has divided the total net gap for each year proportionately as per the ratio of approved ARR in the respective years. The calculations are shown below:

TABLE 3.1: ALLOCATION OF TRUE UP GAP (INR CRORE)

	Approved for All Existing Plant	Approved for Leshka	Gap Estimated by MePGCL	Proportionate Gap for Leshka	Proportionate Gap for Existing Power Plant	Proportionate Gap for Existing Power Plant except Sonapani	Proportionate Gap for Sonapani
FY 2013-14	58.64	135.54	151.65	105.85	45.80	45.29	0.51
FY 2014-15	69.93	135.54	180.53	119.09	61.44	60.76	0.68

Further, MePGCL has added the gap components to approved ARR for FY 2016-17 and considered the same for calculating revised Generation tariff. MePGCL has considered Design Energy approved for FY 2016-17 and accordingly calculated Fixed and Energy charges as per the methodology adopted by the Hon'ble Commission in the MYT Order for FY 2015-16 to FY 2017-18.

TABLE 3.2: CALCULATION OF REVISED ARR FOR FY 2016-17 (INR CRORE)

	MePGCL Old Generating Stations	Sonapani	Leshka HEP
Approved in MYT Order for FY 2016-17	83.05	0.93	135.54
Add True Up Gap of FY 2013-14	45.29	0.51	105.85
Add True Up Gap of FY 2014-15	60.76	0.68	119.09
Total AFC including Gap	189.10	2.12	360.49

Based on the above described methodology, MePGCL has projected revised Generation Tariff for FY 2016-17 and humbly prays before the Hon'ble Commission to approve the same.

TABLE 3.3: PROPOSED REVISED TARIFF FOR FY 2016-17

Revised Tariff for FY 2016-17							
Sl No	Name of the Plant	Capacity (MW)	Designed/ Annual Energy(MU)	AFC Allocation (INR Crore)	Average Tariff (INR/Unit)	50% as Capacity Charges(INR Crore)	50% as Energy charges(INR/KWH)
1	Umiam I	36	116.00	36.37	3.13	18.18	1.57
2	Umiam II	20	46.00	20.20	4.39	10.10	2.20
3	Umiam III	60	139.00	60.61	4.36	30.30	2.18
4	Umiam IV	60	207.00	60.61	2.93	30.30	1.46
5	Umtru	11.2	39.00	11.31	2.90	5.66	1.45
	Sub: Total	187.2	547.00	189.10			
6	Sonapani	1.5	5.00	2.12	4.24	1.06	2.12
	Sub Total	188.70	552.00	191.22			
7	Leshka	126	478.94	360.49	7.53	180.24	3.76
	Total	314.70	1030.94	551.70			